

Process		No. Events
<hr/> <i>ν_μ Events (By Final State Topology)</i> <hr/>		
CC Inclusive		122,100
CC 0 π	$\nu_\mu N \rightarrow \mu + Np$	78,500
	· $\nu_\mu N \rightarrow \mu + 0p$	16,500
	· $\nu_\mu N \rightarrow \mu + 1p$	44,200
	· $\nu_\mu N \rightarrow \mu + 2p$	8,300
	· $\nu_\mu N \rightarrow \mu + \geq 3p$	9,500
CC 1 π^\pm	$\nu_\mu N \rightarrow \mu + \text{nucleons} + 1\pi^\pm$	30,300
CC $\geq 2\pi^\pm$	$\nu_\mu N \rightarrow \mu + \text{nucleons} + \geq 2\pi^\pm$	2,700
CC $\geq 1\pi^0$	$\nu_\mu N \rightarrow \mu + \text{nucleons} + \geq 1\pi^0$	13,400
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NC Inclusive		45,900
NC 0 π	$\nu_\mu N \rightarrow \text{nucleons}$	29,900
NC 1 π^\pm	$\nu_\mu N \rightarrow \text{nucleons} + 1\pi^\pm$	6,900
NC $\geq 2\pi^\pm$	$\nu_\mu N \rightarrow \text{nucleons} + \geq 2\pi^\pm$	900
NC $\geq 1\pi^0$	$\nu_\mu N \rightarrow \text{nucleons} + \geq 1\pi^0$	9,200
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<i>ν_e Events</i>		
CC Inclusive		820
NC Inclusive		290
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Total ν_μ and ν_e Events		169,180
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<i>ν_μ Events (By Physical Process)</i>		
CC QE	$\nu_\mu n \rightarrow \mu^- p$	67,500
CC RES	$\nu_\mu N \rightarrow \mu^- \pi N$	37,300
CC DIS	$\nu_\mu N \rightarrow \mu^- X$	14,500
CC Coherent	$\nu_\mu Ar \rightarrow \mu Ar + \pi$	480
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Table 1: Estimated event rates using GENIE (v2.8) in a 6.6e20 POT exposure of MicroBooNE, located 470m from the neutrino source, the Booster Neutrino Beam. In enumerating proton multiplicity, we assume a kinetic energy threshold on protons of 20 MeV. The 0π topologies include any number of neutrons in the event. This study uses a 17cm fiducial volume cut in MicroBooNE, which gives a fiducial volume of 61t.